

Claims

1. Method for monitoring changes and states in reaction chambers,
characterized in that a fluid is transported out of a reservoir to a supply unit and
drips or flows into a drip chamber so that air bubbles that are transported with
5 said fluid escape into the environment, and in that said fluid forms a supply above
a head (7) and a reaction chamber (2), whereby the height of the fluid surface (4)
and thus the supply volume is determined using a first through-channel (5) and a
fluid exchange occurs in said reaction chamber due to the suctioning via said first
through-channel (5) and the flowing of said fluid out of said drip chamber caused
10 thereby.
2. Method in accordance with claim 1, characterized in that said fluid is
transported into said drip chamber via a second through-channel (6).
3. Method in accordance with either of claims 1 or 2, characterized in that
the height of said fluid surface (4) and thus the supply volume is determined using
15 a third through-channel (11).
4. Method in accordance with any of claims 1 through 3, characterized in
that a change in said fluid (3) or in a surface in said reaction chamber (2) is
initiated by living cells, cell components, DNA, RNA, enzymes, antibodies,
and/or chemical, biochemical, and/or immunological reactions.

5. Method in accordance with any of claims 1 through 4, characterized in that said liquid flows through said reaction chamber (2) continuously or alternately in flow or stop phases.

6. Method in accordance with any of claims 1 through 5, characterized in that said reaction chamber (2) can be changed by a lifting mechanism of the head carrier (1) so that said fluid in said drip chamber is mixed with said fluid in said reaction chamber (2).

7. Method in accordance with any of claims 1 through 6, characterized in that a membrane (14) is arranged in said reaction chamber (2) such that said fluid does not flow directly into portions of said reaction chamber (2).

8. Supply unit for monitoring changes and states in reaction chambers, characterized in that a first through-channel (5) opening into the reaction chamber (2) suctions a fluid (3) and the inlet occurs via a second through-channel (6) above the fluid surface (4) into a drip chamber.

9. Supply unit in accordance with claim 8, characterized in that said first through-channel (5) is arranged within said head carrier (1) and opens into said reaction chamber (2).

10. Supply unit in accordance with claim 8, characterized in that said first through-channel (5) is arranged in the bottom of said reaction chamber (2).

5 11. Supply unit in accordance with any of claims 8 through 10, characterized in that said head carrier (1) comprises a head (7) with a stock-shaped shaft (8) and an enlargement (9) for accommodating said second through-channel (6).

12. Supply unit in accordance with any of claims 8 through 10, characterized in that said second through-channel (6) for supplying said fluid is arranged adjacent to said head carrier (1).

10 13. Supply unit in accordance with any of claims 8 through 12, characterized in that a third through-channel (11) is arranged within said receptacle (10) such that as an emergency suction it prevents an overflow.

14. Supply unit in accordance with any of claims 8 through 13, characterized in that arranged above said enlargement (9) and within said receptacle (10) is a second enlargement (12) for accommodating a third through-channel (11) that as
15 an emergency suction prevents an overflow.

15. Supply unit in accordance with any of claims 8 through 14, characterized in that the surface is provided with a hydrophobic and/or hydrophilic coating.

16. Supply unit in accordance with any of claims 8 through 15, characterized in that sensor systems (13) for detecting the change in said fluid are arranged in said reaction chamber (2) and/or in said first through-channel (5).